



QUANTITATIVE  
FINANCE  
SOCIETY

# Quantitative Finance Society

General Meeting: Spooky Trades and Freaky Fraud





# Why is Fraud Freaky?

---

Fraud, deceit, and hoaxes distort markets and misallocate capital.

## Topics

---

- ❖ Death Arbitrage
- ❖ Ponzi Schemes
- ❖ Company Specific Scandals





# Death Arbitrage

---

## Background

- Esoteric Estate Planning Tools Issued by Banks
- Joint-Ownership CDs
- Bonds Redeemed Immediately at Par (hidden puttable bond)
- Enables Risk Transfer
- Adverse Selection

## Idea

- Most Estate Insurance Plans assumed average lifespans
- Use contacts at nursing homes and hospices to identify terminally ill people with these “death bonds”
- Death put + terminal illness = death arbitrage

## Outcome

- Hedge fund arbitrage strategy, banks would refuse to redeem bonds
- “fair exploitation of wall street loophole”
- Legal issues in practice, notion of the corporation
- SEC sides with insurance



# Ponzi Scheme

---

## Overview

- Old investors get told about great returns. Withdrawals covered by capital from new investors.
- Rob investor A to pay investor B
- Works until capital can no longer cover withdrawals

## Original Ponzi

- Charles Ponzi's postal stamp
- Stamps used to be cheaper in Italy than in US
- Actually worked! (kinda)
- Promised 50% profits in 45 days, 100% in 90 days

## Bernie Madoff

- Most notorious Ponzi
- Madoff had extremely impressive returns (~10% for decades)
- Stole \$20B from clients that he claimed was worth \$65B





# Libor Fixing Scandal

---

## Summary

- Interbank rate tied to many contracts and agreements
- Banks were supposed to report the real cost of borrowing and lending
- Ideally functions as a barometer of lending health
- Structure is gameable

## Examples

- RBS rates traders in Singapore sent IMs asking for the firms yen Libor submission to be adjusted
- Series of investigations and reports from governments and financial media makes BBA transfer Libor to govt.

## Legacy

- Increased urgency in the implementation of market based rates (SOFR)
- Deepened public distrust of major financial intuitions





Enron Stock Price from August 23, 2000 to January 11, 2002



# Enron

## Accounting Fraud, Lies, Assholes

### Accounting Issues / Earnings Manipulation

- Revenue Recognition Fraud
- Downfall of Arthur Andersen
- Earnings Targeting Rather than Operations Targeting

### Aggressive Culture but a Market Darling

- Accusations / Critics all ignored
- Debt paydown to reassure everyone (but nobody noticed that they used more debt to do it)
- Dynegy intervention?



From initial private offerings at 30 cents a share, Bre-X stock climbed to more than \$250 on the open market. Near the peak of Bre-X share prices, major banks and media were on board.



Egizio Bianchini, stock broker and one of Canada's top gold analysts, said "What most people are now realizing is that Bre-X has made one of the great gold discoveries of our generation."



J.P. Morgan bankers talked up Busang in a conference call in which Bre-X's top geologist predicted the deposit might contain a staggering 200 million oz of gold, worth over \$240 billion in 2014 prices. Morgan declined to comment.



Major mining companies such as Barrick Gold, Placer Dome, and Freeport-McMoRan Copper & Gold, among other top producers, fought an epic battle to get a piece of Bre-X's Busang deposit.



Fidelity Investments, Invesco Funds Group, and other mutual-fund companies piled into the stock.



Indonesia's Suharto regime managed to grab 40% of the deposit for Indonesian interests.

In December 1996, Lehman Brothers Inc. strongly recommended a buy on "the gold discovery of the century."

\$ 286

300  
280  
260  
240  
220  
200  
180  
160  
140  
120  
100  
80  
60  
40  
20

## Bre-X

- Penny stock CEO is convinced to invest in Indonesian mine by two geologists
  - One of whom has 5 independent wives who know nothing about the others
- Crushed core samples used to continuously drive up gold reserves in land
  - "nugget effect" used as justification
- Junior geologist confusion at core samples lying around open and due diligence from competitors
- Indonesian government revokes Bre-x license, enters split deal with Freeport-McMoRan to begin excavation
- Freeport finds 0.01 g/tonne vs promised 4.39
- Equity research clueless throughout this process
- Helicopter death, robbery, torture, everyone gets away with it but the lawyer





# Salad Oil Scandal



## Anthony "Tino" De Angelis

- Con-man at young age – as a teenager he worked in meat market managing 200 employees. He overcharged government under National School Lunch Act and delivered 2 million pounds of uninspected meat.
- Takes advantage of government programs through Salad Oil Scandal, stashed money in Swiss Bank Account.
- Then Jailed for 7 Years – after release Tino becomes involved in Ponzi Schemes.

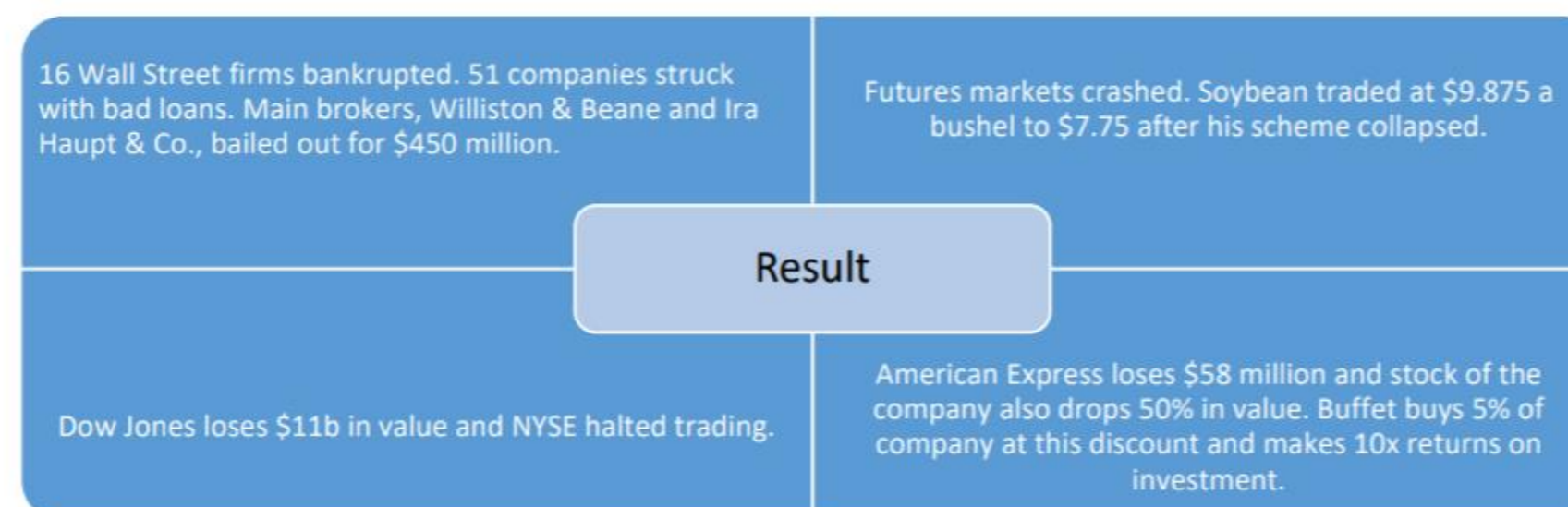
## Didn't even try to hide his fraud

### 1. Tanks filled with water not oil

- Tanks were filled mostly with water with a minimum of oil floating on the top to fool the inspectors, or that some of the tanks were connected with pipes to other tanks so the oil could be transferred between tanks when the inspectors went from one tank to the other.

### 2. USDA Inventories

- The receipts and reported inventories that De Angelis had were more than the entire United States inventories as reported by the USDA.
- Only had \$6 million of the \$150 million collateral.







*Sino-Forest Corporation*



# Sino-Forest Corporation

---

## Sino-Forest

---

- Sino-Forest is a Canadian company claimed to be one of the top commercial forest plantation operators in China with \$3 billion in timber assets

## Muddy Waters

---

- In 2011, Muddy Waters Research released a report alleging that they had fraudulently inflated their assets and earnings

## Ponzi Scheme

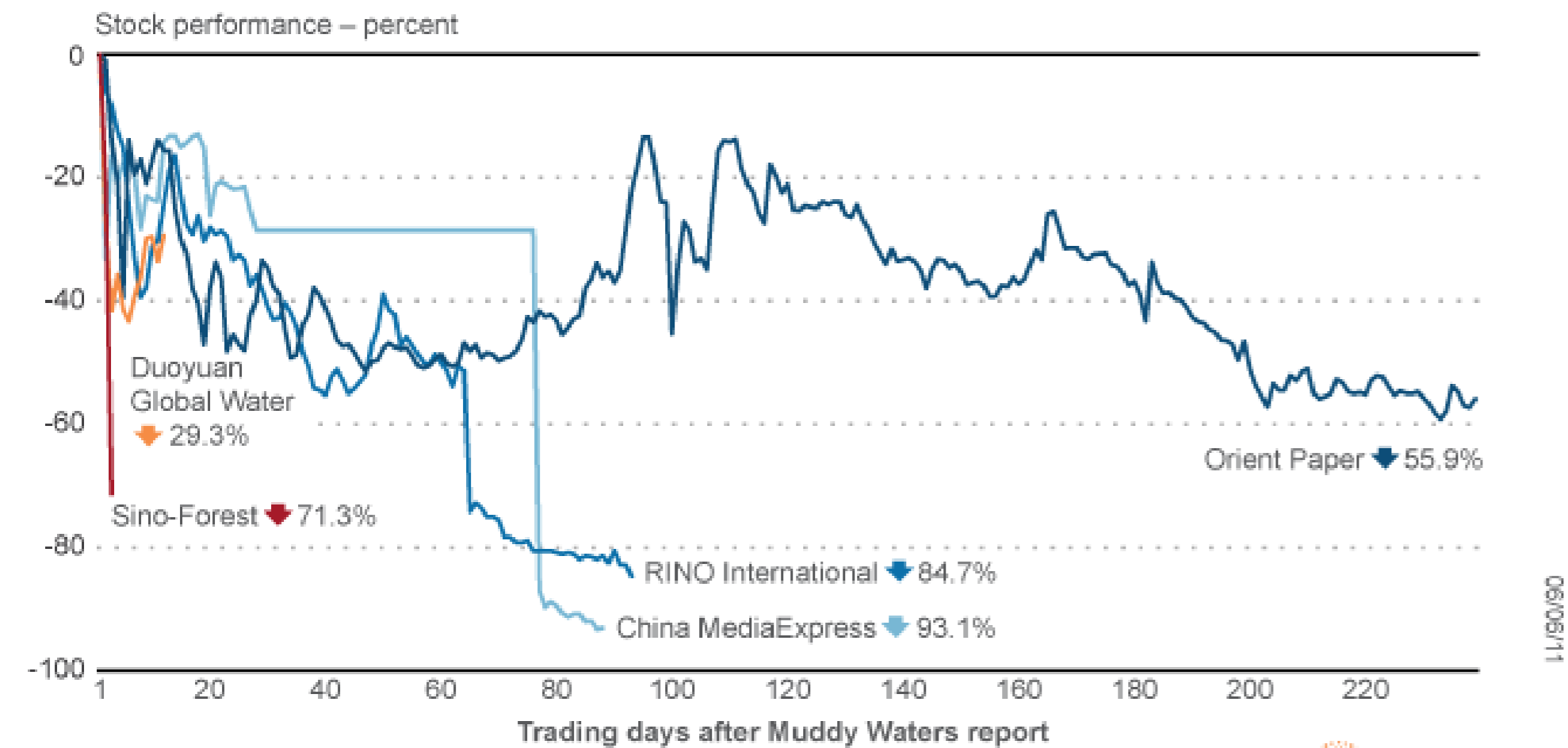
---

- They claimed it was a “multibillion dollar Ponzi scheme” that was “accompanied by substantial theft”



## Muddy Waters and its impact on share prices

Sell-side research firm Muddy Waters has amassed a perfect record of sinking the stocks it reports on, with none nearing their former highs.



Source: Thomson Reuters

Reuters graphic/Stephen Culp



# Sino-Forest Aftermath

## Aftermath

- After the report, shares fell 82%, Paulson sold his entire stake, and S&P downgraded their credit rating

## OSC

- Ontario Securities Commission's investigation had trouble verifying company assets and alleged that Sino-Forest falsified ownership and documentation of those assets

## Bankruptcy

- In 2012, Sino-Forest Filed for bankruptcy protection in Canada and all assets were handed to debt holders





# Gowex

---

## Summary of Fraudulence

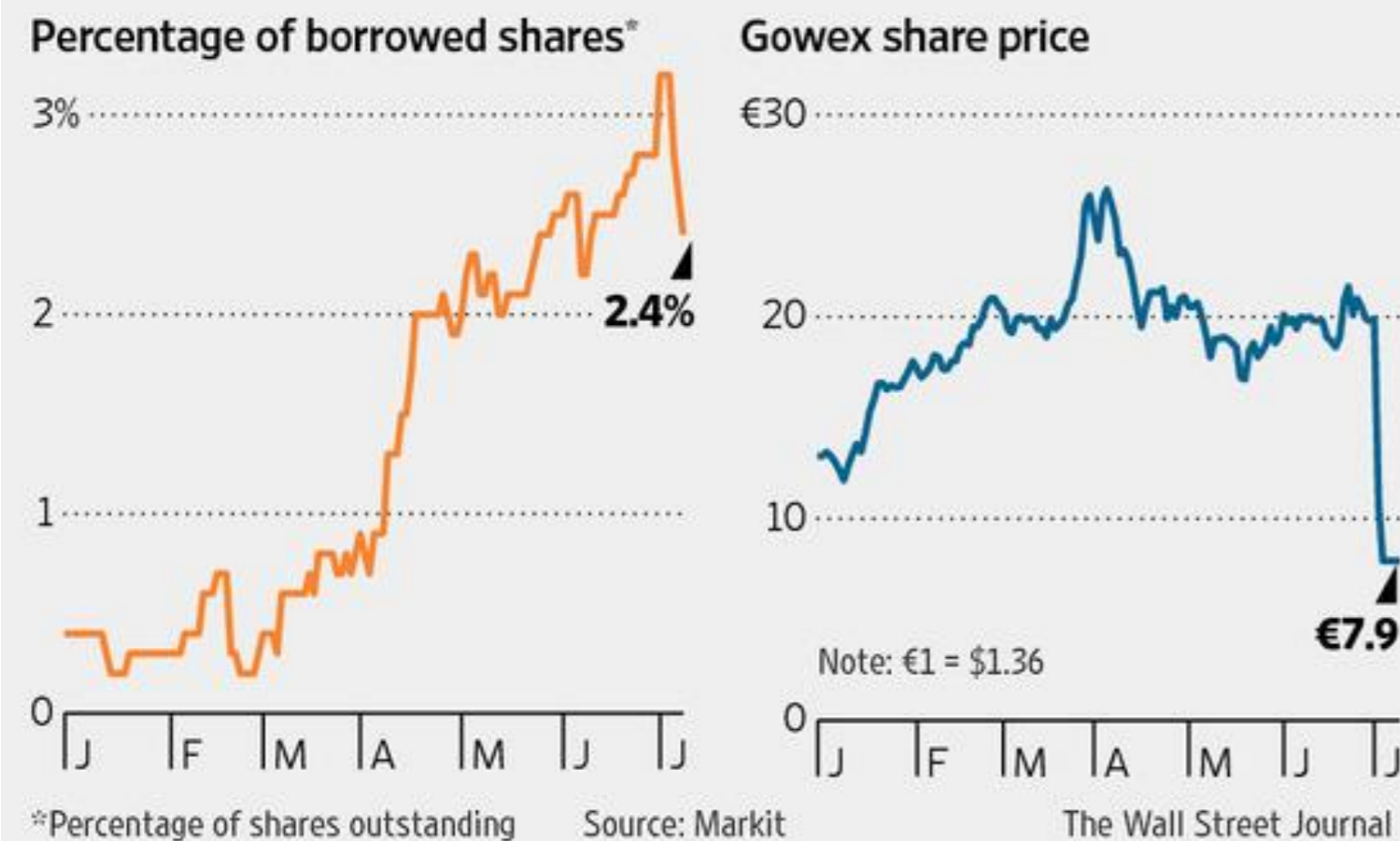
- Overstated earnings by 10x – actual revenues were 10% of what was reported in financial statements
- Owns 5k networks – CEO stated that company owned 100k
- Audit fee was \$40k, which only makes sense if actual revenues were 10% of what was reported.
- 90% of revenues were from undisclosed related parties, tied to the CFO and an early investor. AKA Gowex's largest customer was itself
- Gowex told investors that NYC pays Gowex 7.5m. Real number was 200k.
- Head of IR was CEO's wife (she signed off on GOW's annual reports), and CEO previously was a director at a penny stock fraud company.





### Short Climb, Long Fall

Shares of Let's Gowex SA fall sharply after Gotham City Research report questioning the Spanish technology firm's finances, news preceded by an increase in Gowex short positions.



# GCR vs. Gowex

## Summary of Gotham City Research

- Companies suspected of large-scale fraud are brought to justice by attempting to drive down their share price through the publication of critical financial reports and short positions in its stock.
- Within days of alleging that Gowex, a Spanish wi-fi provider, had cooked its books, the company **admitted it was bankrupt** and four years of accounts were worthless.
- Gotham's superhero image has been enhanced by a refusal to reveal any details about its identity, other than the name of its founder – Daniel Yu.